

1044627



# PATENT SPECIFICATION

DRAWINGS ATTACHED

1044627

Inventor: FRANK FOWLER

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## COMPLETE SPECIFICATION

### Improvements in or relating to Dispensing Heads for Pressurised Dispensing Containers

We, BENDER LABORATORIES LIMITED, a British Company, of Holmes Chapel, Cheshire, do hereby declare the invention, for which we pray that a patent may be granted to us, and the method by which it is to be performed, to be particularly described in and by the following statement:—

The present invention relates to a cap for a mouthpiece the mouthpiece being adapted to fit over the valve of a pressurised aerosol dispensing container.

For many bronchial afflictions it is desirable for medicaments to be inhaled directly by the patient, and it has been known for many years that a convenient method for administration of the medicament is by means of an aerosol.

A suitable aerosol may be obtained in various ways, for example by insufflation of a powder, or by dispersing the medicament in a propellant under pressure in a container which ejects a fine spray of "aerosol" of the medicament. Currently it has been found more convenient to use the latter method and generally the medicament is contained in a small container together with the propellant, and a mouthpiece is fitted onto the container, part of which may be placed in or over the mouth of the patient such that release of the aerosol dispensing valve results in a spray of medicament being directed into the mouth of the patient.

The present invention provides a cap for the mouthpiece when it is not in use, the cap serving the dual function of protecting the mouthpiece from contamination and at the same time preventing accidental actuation of the valve while it is being carried in the users handbag or pocket.

Accordingly, the present invention is for a cap for an aerosol dispensing container provided with a mouthpiece adapted to operate the aerosol dispensing valve of the aerosol

dispensing container by relative movement between the mouthpiece and the aerosol dispensing container, which cap is provided with an extension which interposes between the aerosol dispensing container and the mouthpiece to prevent said relative movement.

An embodiment of the present invention is illustrated in the drawings accompanying the provisional specification.

Figure I of the drawings illustrates an elevational view of a mouthpiece protected by a cap of the present invention. The mouthpiece is illustrated in position in an aerosol dispensing container.

Figure II is a plan view from position A of the cap illustrated in Figure I.

The mouthpiece comprises a shell 1 provided with two openings 2 and 3 disposed at right angles to each other. Opening 2 is the mouthpiece opening adapted to be inserted into the mouth and opening 3 is the opening adapted to co-operate with the aerosol dispensing container. Facing the opening 3 is a projection 4 from the shell 1 which is provided with opening 5 connecting with jet 6. The walls of the shell 1 at opening 3 terminate in a narrowed orifice which makes a substantially air-tight seal with the aerosol dispensing container 7.

The aerosol dispensing container 7 is provided with an outlet which comprises a hollow cylinder 9 with an inlet port 10. The outlet co-operates with the metering vessel 11 which communicates with the container 7 through the gap 12 when the outlet is in the normal position. Depression of the outlet 9 against spring 13 but in the absence of the cap closes the gap 12 and brings inlet port 10 into co-operation with the metering vessel 11 and the contents vent through the outlet 9 into the opening 5, then through the jet 6 and finally through the mouthpiece opening 2 into the mouth of the patient.

5 The cap for the mouthpiece comprises an  
end piece 17 provided with a projection 14.  
It will be seen that the projection 14 consists  
of a hollow cylinder diagonally cut-away at  
15 and forked at 16. The cap is adapted to be  
inserted in the mouthpiece opening as illus-  
trated in Figure 1 in which position it bears  
against the top of container 7 thus preventing  
relative movement between the container and  
10 the mouthpiece. With the cap in position there-  
fore it is not possible for the aerosol dispens-  
ing valve to be actuated. The projection 14  
passes around cylinder 9 which lies between  
the prongs of fork 16. It is not necessary  
15 therefore to disengage cylinder 9 from opening  
5 when the cap is in position. The cap also  
serves to take the load off spring 13 by lifting  
shell 1 and creating a gap between cylinder 9  
and its seating in projection 4.

20 WHAT WE CLAIM IS:—

1. A cap for an aerosol dispensing container

provided with a mouthpiece adapted to oper-  
ate the aerosol dispensing valve of the aerosol  
dispensing container by relative movement be-  
tween the mouthpiece and the aerosol dispens-  
ing container, which cap is provided with an  
extension which interposes between the aerosol  
dispensing container and the mouthpiece, to  
prevent said relative movement.

2. A cap as claimed in claim 1 substan-  
tially as herein described.

3. A cap as claimed in claim 1 substantially  
as herein described with reference to the draw-  
ings accompanying the provisional specifica-  
tion.

F. MURPHY,  
Agent for the Applicants,  
Chartered Patent Agent,  
Fisons Limited,  
Harvest House,  
Felixstowe, Suffolk.

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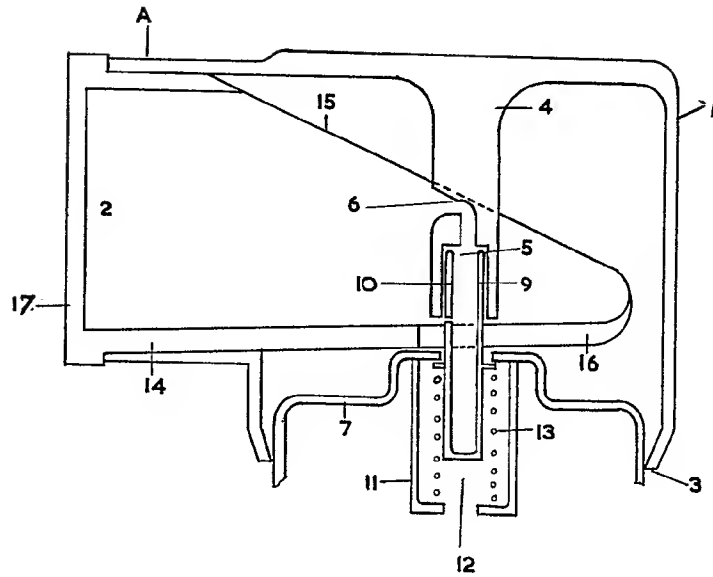


FIG. I.

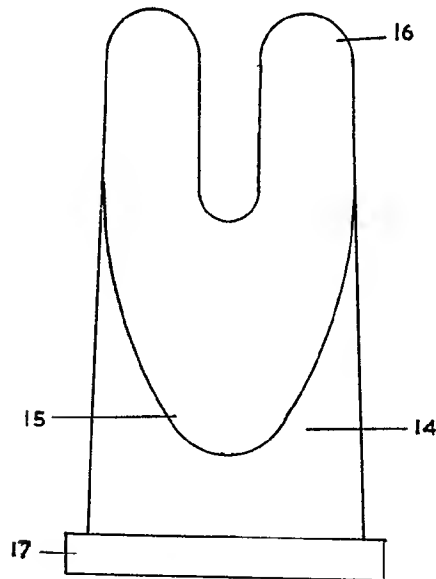


FIG. II